## Abstract:

A vibration sensor for monitoring the state of rotating components or bearings is described, with a housing (2), with a sensor element (3), with evaluation electronics (4) and with at least one interface (5, 6).

With the vibration sensor (1) reliable monitoring of the state of rotating components and bearings can be done easily and thus economically, and in addition the vibration sensor can be easily operated, in that the evaluation electronics (4) has an analog/digital converter (7) and a signal conditioning means (8) and in the signal conditioning means (8) a plurality of signals which have been acquired by the sensor element (3) are converted into a state value using signal analysis and a diagnosis algorithm.